## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NESHAP SOURCE

## PERMITTEE

Molex, Inc.

Attn: Mr. Mike Lepore, Facility Manager

2222 Wellington Court

Lisle, Illinois 60532-1682

<u>Application No.</u>: 05030031 <u>I.D. No.</u>: 043055ABD

Applicant's Designation: Date Received: March 10, 2005

Subject: Boilers and Generators

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of:

- Two (2) 3.85 mmBtu/hour natural gas/distillate fuel oil-fired boilers
   (Kewanee Boilers #1 & #2);
- Two (2) 1,078 kW (3.68 mmBtu/hour) natural gas-powered co-generators (Waukesha #1 & #2);
- One (1) 2,055 kW (19.14 mmBtu/hr) natural gas-powered co-generator (Cat Model G 3520);
- One (1) 900 kW diesel-powered emergency generator; and
- One (1) 500 kW diesel-powered emergency generator;

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO) and Nitrogen Oxides (NO $_{\rm x}$ )). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 205 (Emission Reduction Market System). The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit for  $NO_x$  to less than 100 tons per year so that the source is not subject to the requirements of 35 Ill. Adm. Code Part 217 Subpart Q (Stationary Reciprocating Internal Combustion Engines And Turbines).

- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. The two diesel-powered emergency generators and the three natural gas-powered co-generators are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 63.6585, an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
- Pursuant to 40 CFR 63.6595(a)(1), if you have an existing stationary b. RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.
- c. Pursuant to 40 CFR 63.6603, compliance with the numerical emission limitations established in 40 CFR Part 63 Subpart ZZZZ is based on the result of testing the average of three 1-hour runs using the testing requirements and procedures in 40 CFR 63.6620 and Table 4 (see Attachment C) to 40 CFR 63 Subpart ZZZZ.
  - i. If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d (see Attachment B) to 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR 63 Subpart ZZZZ that apply to you.
  - ii. An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in 40 CFR 63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under 40 CFR 63 Subpart ZZZZ. Owners and operators of existing

non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in 40 CFR 63.6675 as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in 40 CFR 63.6675, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hour of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).
- d. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
- 4a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- b Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to

exceed 2000 ppm.

- c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable 35 Ill. Adm. Code Part 214 Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b)).
- 5. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G (Use of Organic Material) shall only apply to photochemically reactive material.
- 6. This permit is issued based on the two boilers not being subject to the New Source Performance Standard (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc because the firing rate of each boiler is less than 10 mmBtu/hour. Pursuant to 40 CFR 60.40c(a), except as provided in 40 CFR 60.40c(d), (e), (f), and (g), the affected facility to which 40 CFR 60 Subpart Dc applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (mmBtu/hr)) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr).
- 7a. This permit is issued based on the boilers at this source not being subject to the requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), gas-fired boilers are not subject to 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of HAP as defined in 40 CFR 63.2.
- 8. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In

- cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- 9a. Pursuant to 40 CFR 63.6604(b), beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
- b. Pursuant to 40 CFR 63.6605(a), you must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply to you at all times.
- c. Pursuant to 40 CFR 63.6605(b), at all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- d. Pursuant to 40 CFR 63.6625(e)(3), if you own or operate an existing emergency or black start stationary RICE located at an area source of HAP emissions you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- e. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
- f. Pursuant to 40 CFR 63.6625(h), if you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to

- exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 CFR 63 Subpart ZZZZ apply.
- Pursuant to 40 CFR 63.6625(i), if you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 1 or 4 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
- Pursuant to 40 CFR 63.6625(j), if you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 5, 6, 7, 9, or 11 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that

- are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
- i. Pursuant to 40 CFR 63.6630(a), you must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 (see Attachment D) of 40 CFR 63 Subpart ZZZZ.
- j. Pursuant to 40 CFR 63.6630(b), during the initial performance test, you must establish each operating limitation in Tables 1b and 2b of 40 CFR 63 Subpart ZZZZ that applies to you.
- k. Pursuant to 40 CFR 63.6630(c), you must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6645.
- 1. Pursuant to 40 CFR 63.6630(d), non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of 40 CFR 63 Subpart ZZZZ. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.
- m. Pursuant to 40 CFR 63.6640(a), you must demonstrate continuous compliance with each operating limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 (see Attachment E) to 40 CFR 63 Subpart ZZZZ.
- n. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.
  - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
  - ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR

- 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).
- A. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
- B. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- C. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - A. Prior to May 3, 2014, the 50 hours per year for nonemergency situations can be used for peak shaving or nonemergency demand response to generate income for a
    facility, or to otherwise supply power as part of a
    financial arrangement with another entity if the engine is
    operated as part of a peak shaving (load management
    program) with the local distribution system operator and
    the power is provided only to the facility itself or to
    support the local distribution system.
  - B. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement

with another entity if all of the following conditions are met:

- I. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- II. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- III. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- IV. The power is power provided only to the facility itself or to support the local transmission and distribution system.
- V. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- Pursuant to 40 CFR 63.6665, Table 8 (see Attachment G) to 40 CFR 63 Subpart ZZZZ shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE,

or a new limited use stationary RICE.

- p. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:
  - i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
  - ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).
  - iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f)(4)(i) or (ii).
- 10a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
  - b. The 900kW & 500kW emergency generators shall only be operated with distillate fuel oil as the fuel. The use of any other fuel in the 900kW or 500kW emergency generators requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
  - c. Waukesha Generators #1 and #2, and the Cat Model G3520 generator shall only be operated with natural gas as the fuel. The use of any other fuel in Waukesha Generators #1 or #2, or the Cat Model G3520 generator requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
  - d. Kewanee Boilers #1 and #2 shall only be operated with natural gas or distillate fuel oil as the fuel. The use of any other fuel in Kewanee Boilers #1 or #2 requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

- e. The Permittee shall not keep, store, or use distillate fuel oil (Grades No. 1 and 2) at this source with sulfur content greater than the larger of the following two values:
  - i. 0.28 weight percent, or
  - ii. The wt. percent given by the formula: Maximum wt. percent sulfur =  $(0.000015) \times (Gross heating value of oil, Btu/lb)$ .
- f. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.
- g. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 11a. Emissions and operation of Kewanee boilers #1 & #2 shall not exceed the following limits:
  - i. Distillate fuel oil usage: 48,180 gallons/month, 481,800 gallons/year.
  - ii. Emissions from the combustion of distillate fuel oil:

	Emission Factor	Emiss	ions
Pollutant	$(lbs/10^3 Gal)$	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	5.00	0.12	1.20
Nitrogen Oxides (NO <sub>x</sub> )	20.00	0.48	4.82
Particulate Matter (PM)	2.00	0.05	0.48
Sulfur Dioxide (SO <sub>2</sub> )	39.76	0.96	9.58
Volatile Organic Material (VOM)	0.34	0.01	0.08

These limits are based on the maximum fuel usage (3.85 mmBtu/hr each boiler), the maximum operating hours (8760 hours/year), and standard emission factors (Tables 1.3-1 and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1998).

- iii. Natural Gas Usage: 6.75 mmscf/month, 67.45 mmscf/year.
- iv. Emissions from the combustion of natural gas:

	Emission Factor	Emiss	sions
Pollutant	(lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84.0	0.28	2.83
Nitrogen Oxides $(NO_x)$	100.0	0.34	3.37
Particulate Matter (PM)	7.6	0.03	0.26
Sulfur Dioxide $(SO_2)$	0.6	0.01	0.02
Volatile Organic Material (VOM)	5 <b>.</b> 5	0.02	0.19

These limits are based on the maximum fuel usage (3.85 mmBtu/hr each boiler), the maximum operating hours (8760 hours/year), and

standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- b. Emissions and operation of Waukesha generators #1 and #2 shall not exceed the following limits:
  - i. Natural Gas Usage: 6,447.4 mmBtu/month, 64,474 mmBtu/year.
  - ii. Emissions from the combustion of natural gas:

	Emission Factor	Emiss	sions
Pollutant	(lbs/mmBtu)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	0.317	1.02	10.22
Nitrogen Oxides ( $NO_x$ )	0.847	2.73	27.30
Particulate Matter (PM)	0.0099	0.03	0.32
Sulfur Dioxide $(SO_2)$	0.0006	0.01	0.02
Volatile Organic Material (VOM)	0.118	0.38	3.80

These limits are based on the maximum fuel usage (3.68 mmBtu/hr each engine), and standard emission factors (Tables 3.2-2 and 3.2-3, AP-42 Fifth Edition, Volume I, Supplement F, August 2000).

c. Emissions and operation of the Cat Model G3520 generator shall not exceed the following limits:

		l Gas Ing stu/Hour)	out				E	_	e Output BHP)	-	
	1	9.137						2	,889		
		E	М	Ι	S S	s I	0	N	S		
C	С	NO	x		P	M		S	$O_2$	VO:	M
(lb/Hr)	(T/Yr)	(lb/Hr)	(T/Yr		(lb/Hr)	(T/Yr)	<u>(lb</u>	/Hr)	(T/Yr)	(lb/Hr)	(T/Yr)
13.75	60.20	3.18	13.9	3	0.19	0.83	0.	.01	0.05	4.65	20.35

These limits are based on the maximum heat input (19.137 mmBtu/hr), the maximum operating hours (8760 hours/year),  $NO_x$ , CO, and VOM emission factors from manufacture, and standard emission factors for PM and  $SO_2$  (Tables 3.2-2 and 3.2-3, AP-42 Fifth Edition, Volume I, Supplement F, August 2000).

- d. Emission and operation of two (2) diesel-powered emergency generators (500 kW and 900 kW) shall not exceed the following limits:
  - i. Distillate fuel oil usage: 3,414 gallons/month and 34,143
    gallons/year.
  - ii. Emissions from the combustion of distillate fuel oil:

	Emission		
	Factor	Emis	sions
Pollutant	(lbs/mmBtu)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	0.85	0.20	2.02
Nitrogen Oxides $(NO_x)$	3.20	0.76	7.65
Particulate Matter (PM)	0.10	0.02	0.24
Sulfur Dioxide $(SO_2)$	0.29	0.07	0.68
Volatile Organic Material (VOM)	0.10	0.02	0.20

These limits are based on the maximum fuel usage, the maximum operating hours (1,000 hours/year), a fuel heat content of 140,000 Btu/gallon for No. 2 fuel oil, a sulfur content of 0.28% by weight, and standard emission factors (Table 3.4-1, AP-42, Volume I, Fifth Edition, Supplement B, October 1996).

- g. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 12. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a CAAPP Permit from the Illinois EPA.
- 13a. Pursuant to 40 CFR 63.6620(a), you must conduct each performance test in Tables 3 and 4 of 40 CFR 63 Subpart ZZZZ that applies to you.
  - b. Pursuant to 40 CFR 63.6620(b), each performance test must be conducted according to the requirements that 40 CFR 63 Subpart ZZZZ specifies in Table 4 to 40 CFR 63 Subpart ZZZZ. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in 40 CFR 63.6620(b)(1) through (4).
  - c. Pursuant to 40 CFR 63.6620(d), you must conduct three separate test runs for each performance test required in 40 CFR 63.6620, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in 40 CFR 63 Subpart ZZZZ.
  - e. i. Pursuant to 40 CFR 63.6620(e)(1), you must use Equation 1 of 40 CFR 63.6620 to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

 $C_i$  = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

 ${\rm C_{\rm o}} = {\rm concentration}$  of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

- ii. Pursuant to 40 CFR 63.6620(e)(2), you must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide ( $\rm CO_2$ ). If pollutant concentrations are to be corrected to 15 percent oxygen and  $\rm CO_2$  concentration is measured in lieu of oxygen concentration measurement, a  $\rm CO_2$  correction factor is needed. Calculate the  $\rm CO_2$  correction factor as described in 40 CFR 63.6620(e)(2)(i) through (iii).
  - A. Calculate the fuel-specific  $F_{\circ}$  value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 \, F_d}{F_c}$$
 (Eq. 2)

Where:

 $F_\circ=$  Fuel factor based on the ratio of oxygen volume to the ultimate  $CO_2$  volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

 $F_d$  = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu).

 $F_c$  = Ratio of the volume of  $CO_2$  produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu).

B. Calculate the  $CO_2$  correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{\omega_1} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

 $X_{co2} = CO_2$  correction factor, percent.

5.9 = 20.9 percent  $O_2$  -15 percent  $O_2$ , the defined  $O_2$  correction value, percent.

C. Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent  $O_2$  using  $CO_2$  as follows:

$$C_{abj} = C_d \frac{X_{co_1}}{\% CO_2} \qquad \text{(Eq. 4)}$$

Where:

 $C_{\text{adj}}$  = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent  $O_2$ .

 $C_{\rm d}=Measured$  concentration of CO, THC, or formaldehyde, uncorrected.

 $X_{CO2} = CO_2$  correction factor, percent.

 $CO_2$  = Measured  $CO_2$  concentration measured, dry basis, percent.

- f. Pursuant to 40 CFR 63.6620(f), if you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Illinois EPA or USEPA for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Illinois EPA or USEPA.
- g. Pursuant to 40 CFR 63.6620(i), the engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate

percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

- h. Pursuant to 40 CFR 63.6630(e), the initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
  - i. The compliance demonstration must consist of at least three test runs.
  - ii. Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to 40 CFR 63 Subpart ZZZZ must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
  - iii. If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of 40 CFR 63 Subpart ZZZZ, or using appendix A to 40 CFR 63 Subpart ZZZZ.
  - iv. If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
  - v. You must measure  $O_2$  using one of the  $O_2$  measurement methods specified in Table 4 of 40 CFR 63 Subpart ZZZZ. Measurements to determine  $O_2$  concentration must be made at the same time as the measurements for CO or THC concentration.
  - vi. If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and  ${\rm O_2}$  emissions simultaneously at the inlet and outlet of the control device.
- i. Pursuant to 40 CFR 63.6640(c), the annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
  - i. The compliance demonstration must consist of at least one test
  - ii. Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to  $40~\mathrm{CFR}$   $63~\mathrm{CFR}$

- Subpart ZZZZ must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
- iii. If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of 40 CFR 63 Subpart ZZZZ, or using appendix A to 40 CFR 63 Subpart ZZZZ.
- iv. If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- v. You must measure  $O_2$  using one of the  $O_2$  measurement methods specified in Table 4 of 40 CFR 63 Subpart ZZZZ. Measurements to determine  $O_2$  concentration must be made at the same time as the measurements for CO or THC concentration.
- vi. If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and  ${\rm O_2}$  emissions simultaneously at the inlet and outlet of the control device.
- vii. If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of 40 CFR 63 Subpart ZZZZ, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of 40 CFR 63 Subpart ZZZZ. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of 40 CFR 63 Subpart ZZZZ.
- 14a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing.

Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

- ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 15. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 16a. Pursuant to 40 CFR 63.6625(a), if you elect to install a CEMS as specified in Table 5 of 40 CFR 63 Subpart ZZZZ, you must install, operate, and maintain a CEMS to monitor CO and either  $O_2$  or  $CO_2$  according to the requirements in 40 CFR 63.6625(a)(1) through (4). If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device
  - i. Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.
  - ii. You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
  - iii. As specified in 40 CFR 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-

- minute period, to have a valid hour of data.
- iv. The CEMS data must be reduced as specified in 40 CFR 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent  $\rm CO_2$  concentration.
- b. Pursuant to 40 CFR 63.6625(b), if you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 CFR 63 Subpart ZZZZ, you must install, operate, and maintain each CPMS according to the requirements in 40 CFR 63.6625(b)(1) through (6). For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in 40 CFR 63.6625(b) are applicable September 6, 2011
  - i. You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in 40 CFR 63.6625(b)(1)(i) through (v) and in 40 CFR 63.8(d). As specified in 40 CFR 63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.6625(b)(1) through (5) in your site-specific monitoring plan.
    - A. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
    - B. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
    - C. Equipment performance evaluations, system accuracy audits, or other audit procedures;
    - D. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1)(ii) and (c)(3); and
    - E. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).
  - ii. You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
  - iii. The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635).
  - iv. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range,

whichever is larger.

- v. You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
- vi. You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.
- c. Pursuant to 40 CFR 63.6625(f), if you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
- d. Pursuant to 40 CFR 63.6625(j), if you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to 40 CFR 63 Subpart ZZZZ or in items 5, 6, 7, 9, or 11 of Table 2d to 40 CFR 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to 40 CFR 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.
- e. Pursuant to 40 CFR 63.6635(a), if you must comply with emission and operating limitations, you must monitor and collect data according to 40 CFR 63.6635.
- f. Pursuant to 40 CFR 63.6635(b), except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures

- that are caused in part by poor maintenance or careless operation are not malfunctions.
- g. Pursuant to 40 CFR 63.6635(c), you may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.
- Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that 17. his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- 18a. Pursuant to 40 CFR 63.6655(a), if you must comply with the emission and operating limitations, you must keep the records described in 40 CFR 63.6655(a)(1) through (a)(5), (b)(1) through (b)(3) and (c).
  - i. A copy of each notification and report that you submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
  - ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

- iii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
- iv. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- v. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- b. Pursuant to 40 CFR 63.6655(b), for each CEMS or CPMS, you must keep the records listed in 40 CFR 63.6655(b)(1) through (3).
  - i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi).
  - ii. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
  - iii. Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.
- c. Pursuant to 40 CFR 63.6655(d), you must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.
- d. Pursuant to 40 CFR 63.6655(e), you must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE.
  - i. An existing stationary emergency RICE.
  - ii. An existing stationary CI RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to 40 CFR 63 Subpart ZZZZ.
- e. Pursuant to 40 CFR 63.6655(f)(2), if you own or operate an existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
- f. Pursuant to 40 CFR 63.6660(a), your records must be in a form suitable

- and readily available for expeditious review according to 40 CFR 63.10(b)(1).
- g. Pursuant to 40 CFR 63.6660(b), as specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- h. Pursuant to 40 CFR 63.6660(c), you must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).
- 19. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 20a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. No. 2 fuel oil usage in the boilers, (gallons/month and gallons/year);

  - iii. Hours of operation of the natural gas-fired generator, and the
     two diesel generators (hours/month and hours/year);
  - iv. Natural gas usage for the two boilers, and two generators
     (mmcf/month and mmcf/year);
  - v. The sulfur content of the distillate fuel oil used at the source (% weight), this shall be recorded for each shipment of oil delivered to the source;
  - vi. Monthly and annual CO,  $NO_x$ , PM,  $SO_2$ , and VOM emissions from the source, with supporting calculations (tons/month and tons/year).
  - b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 21a. Pursuant to 40 CFR 63.6640(b), you must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63

Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

- b. Pursuant to 40 CFR 63.6640(e), you must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.
- c. Pursuant to 40 CFR 63.6645(a), you must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
  - i. An existing stationary CI RICE located at an area source of HAP emissions.
  - ii. This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
- d. Pursuant to 40 CFR 63.6645(g), if you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1).
- e. Pursuant to 40 CFR 63.6645(h), if you are required to conduct a

performance test or other initial compliance demonstration as specified in Tables 4 and 5 to 40 CFR 63 Subpart ZZZZ, you must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii).

- i. For each initial compliance demonstration required in Table 5 to 40 CFR 63 Subpart ZZZZ that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
- ii. For each initial compliance demonstration required in Table 5 to 40 CFR 63 Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to 40 CFR 63 Subpart ZZZZ, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2).
- f. Pursuant to 40 CFR 63.6650(a) you must submit each report in Table 7 (see Attachment F) of 40 CFR 63 Subpart ZZZZ that applies to you:
- g. Pursuant to 40 CFR 63.6650(b), unless the Illinois EPA or USEPA has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9).
  - i. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.6595.
  - ii. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.6595.
  - iii. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
  - iv. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
  - v. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.6595 and ending

on December 31.

- vi. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 CFR 63.6595.
- vii. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
- viii. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
- h. Pursuant to 40 CFR 63.6650(c), the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6).
  - i. Company name and address.
  - ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
  - iii. Date of report and beginning and ending dates of the reporting period.
  - iv. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.
  - v. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period
  - vi. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- i. Pursuant to 40 CFR 63.6650(d), for each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in 40 CFR 63 Subpart ZZZZ, the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (4) and the information in 40 CFR 63.6650(d)(1) and (2).

- i. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
- ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- j. Pursuant to 40 CFR 63.6650(e), for each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in 40 CFR 63 Subpart ZZZZ, you must include information in 40 CFR 63.6650(c)(1) through (4) and (e)(1) through (12).
  - The date and time that each malfunction started and stopped.
  - ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
  - iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
  - v. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
  - vi. A breakdown of the total duration of the deviation during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
  - vii. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
  - viii. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
  - ix. A brief description of the stationary RICE.
  - x. A brief description of the CMS.
  - xi. The date of the latest CMS certification or audit.
  - xii. A description of any changes in CMS, processes, or controls since the last reporting period.
- k. Pursuant to 40 CFR 63.6650(h), if you own or operate an emergency

stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3).

- i. The report must contain the following information:
  - A. Company name and address where the engine is located.
  - B. Date of the report and beginning and ending dates of the reporting period.
  - C. Engine site rating and model year.
  - D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
  - E. Hours operated for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii).
  - F. Number of hours the engine is contractually obligated to be available for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii).
  - G. Hours spent for operation for the purpose specified in 40 CFR 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
  - H. If there were no deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
  - I. If there were deviations from the fuel requirements in 40 CFR 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.
- ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- iii. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's

Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR 63 Subpart ZZZZ is not available in CEDRI at the time that the report is due, the written report must be submitted to the Illinois EPA or USEPA at the appropriate address listed in 40 CFR 63.13.

- 22. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 23a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.
  - b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control - Regional Office 9511 West Harrison Des Plaines, Illinois 60016

It should be noted that emission units such as those listed in the soldering. machining and metal forming, the plastic injection molding operations are exempt from permitting requirements, pursuant to  $35 \, \text{Ill.}$  Adm. Code 201.146(y), (aa), and (lll), respectively.

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil Date Signed:

Acting Manager, Permit Section

Division of Air Pollution Control

REP:GB:

cc: Illinois EPA, FOS Region 1 USEPA - Lotus Notes

## <u>Attachment A - Emission Summary</u>

This attachment provides a summary of the maximum emission from the electric connectors manufacturing source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from the source. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for CO and  $\mathrm{NO}_x$ ) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that control measures are more effective than required in this permit.

		E M I S S	I O N S	(Tons/yr)	
Emission Units	<u>CO</u>	NOx	<u>PM</u>	$\underline{SO}_2$	$\underline{\text{MOV}}$
Kewanee boilers #1 & #2:					
Natural Gas	2.83	3.37	0.32	0.02	0.19
#2 Fuel Oil	1.20	4.82	0.48	9.58	0.08
Waukesha Generators #1 & #2	10.22	27.30	0.32	0.02	3.80
Cat Model G3520 Generator	60.20	13.93	0.83	0.05	20.35
500 kW and 900 kW Diesel-					
Powered Emergency Generators	2.02	7.65	0.24	0.68	0.20
Totals:	76.47	57.07	2.19	10.35	24.62

GB:

Attachment B - Table 2d to Subpart ZZZZ of Part 63-Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in 40 CFR 63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

You must meet the following requirement, except during periods of For each startup		During periods of startup you must
4. Emergency stationary CI RICE and black start stationary CI RICE.2	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;1	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non- black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;1	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non- black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;1	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	

For each	You must meet the following requirement, except during periods of startup	During periods of startup you must
9. Non-emergency, non- black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
11. Non-emergency, non- black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;1	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary	
12. Non-emergency, non- black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE	

<sup>1</sup>Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ.

<sup>2</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63 Subpart ZZZZ, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

## Attachment C - Table 4 to Subpart ZZZZ of Part 63-Requirements for Performance Tests

As stated in 40 CFR 63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each	Complying with the requirement			According to the following requirements
	to	You must	Using	
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Measure the ${\rm O_2}$ at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005).ac	(a) Measurements to determine $O_2$ must be made at the same time as the measurements for $CO$ concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005) abc or Method 10 of 40 CFR part 60, appendix A	(a) The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.
		i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005).	(a) measurements to determine $O_2$ concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03.a	(a) measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, aprovided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) formaldehyde concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A	(a) THC concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationar RICE	concentrati on of formaldehyd	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A \$63.7(d)(1)(i)	(a) if using a control device, the sampling site must be located at the outlet of the control device.
		$O_2$ concentration	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (Reapproved 2005).	(a) measurements to determine $O_2$ concentration must be made at the same time and location as the measurements for formaldehyde or $CO$ concentration.

For each	Complying with the requirement			According to the following requirements
		of the stationary	Using  (1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03.a	must be made at the same time and
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, a provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), ac Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.a	this test consist

 $<sup>^{\</sup>rm a}{\rm You}$  may also obtain copies from University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

 $<sup>^{\</sup>mathrm{b}}\mathrm{You}$  may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

 $<sup>^{\</sup>rm c}{\rm ASTM-D6522-00}$  (2005) may be used to test both CI and SI stationary RICE.

Attachment D - Table 5 to Subpart ZZZZ of Part 63-Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

As stated in 40 CFR 63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

	Complying	
	with the requirement	You have demonstrated initial
For each	to	compliance if
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in \$63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O2;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in \$63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in \$63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in \$63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F

Attachment E - Table 6 to Subpart ZZZZ of Part 63-Continuous Compliance With Emission Limitations, and Other Requirements

As stated in 40 CFR 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each	Complying with the requirement to	You must demonstrate continuous compliance by
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

	Complying with the	
For each	requirement to	You must demonstrate continuous compliance by
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in \$63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O2; and either ii. Collecting the catalyst inlet temperature data according to \$63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in \$63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O2, or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to \$63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

Attachment F - Table 7 to Subpart ZZZZ of Part 63-Requirements for Reports As stated in 40 CFR 63.6650, you must comply with the following requirements for reports:

	You must		
	submit a	The report must	You must submit
For each		contain	the report
3. Existing non-emergency,	Compliance	a. The results of	i. Semiannually
non-black start 4SLB and 4SRB	report	the annual	according to the
stationary RICE >500 HP		compliance	requirements in
located at an area source of		demonstration, if	§63.6650(b)(1)-
HAP that are not remote		conducted during	(5).
stationary RICE and that		the reporting	
operate more than 24 hours per		period.	
calendar year			

Attachment G - Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in 40 CFR 63.6665, you must comply with the following applicable general provisions.

General			
provisions		Applies to	
citation	Subject of citation	subpart	Explanation
\$63.1	General applicability of the General Provisions	Yes.	-
§63.2	Definitions	Yes	Additional terms defined in 40 CFR 63.6675.
§63.3	Units and abbreviations	Yes.	
\$63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
\$63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
\$63.6(b)(6)	[Reserved]		
\$63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
\$63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
\$63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
\$63.6(d)	[Reserved]		
\$63.6(e)	Operation and maintenance	No.	
\$63.6(f)(1)	Applicability of standards	No.	
\$63.6(f)(2)	Methods for determining compliance	Yes.	
\$63.6(f)(3)	Finding of compliance	Yes.	
\$63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
\$63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR 63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

General			
provisions		Applies to	
citation	Subject of citation	subpart	Explanation
\$63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR 63.7(b)(1) only applies as specified in 40 CFR 63.6645.
\$63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR 63.7(b)(2) only applies as specified in 40 CFR 63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR 63.7(c) only applies as specified in 40 CFR 63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR 63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR 63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
\$63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR 63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
\$63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
\$63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
\$63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
\$63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	

			1
General			
provisions		Applies to	
citation	Subject of citation	subpart	Explanation
\$63.8(c)(2)-(3)	Monitoring system installation	Yes.	
\$63.8(c)(4)	Continuous monitoring system	Voc	Except that subpart
303.0(0)(4)	(CMS) requirements	162	ZZZZ does not require
	(CMS) requirements		Continuous Opacity
			Monitoring System
			(COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not
			require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart
			ZZZZ does not require
			COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR
			63.8(e)(5)(ii), which
			applies to COMS.
		Except that	
		40 CFR	
		63.8(e)	
		only	
		applies as	
		specified	
		in 40 CFR	
		63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring	Yes	Except that 40 CFR
	method		63.8(f)(4) only
			applies as specified
			in 40 CFR 63.6645.
\$63.8(f)(6)	Alternative to relative	Yes	Except that 40 CFR
	accuracy test		63.8(f)(6) only
			applies as specified
			in 40 CFR 63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions
			for COMS are not
			applicable. Averaging
			periods for
			demonstrating
			compliance are
			specified at 40 CFR
			63.6635 and 63.6640.
§63.9(a)	Applicability and State	Yes.	
	delegation of notification		
	requirements		
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR
			63.9(b)(3) is
			reserved.

General			
provisions		Applies to	
citation	Subject of citation	subpart	Explanation
		Except that	-
		40 CFR	
		63.9(b)	
		only	
		applies as	
		specified	
		in 40 CFR	
		63.6645.	
§63.9(c)	Request for compliance	Yes	Except that 40 CFR
	extension		63.9(c) only applies
			as specified in 40 CFR
			63.6645.
§63.9(d)	Notification of special	Yes	Except that 40 CFR
	compliance requirements for		63.9(d) only applies
	new sources		as specified in 40 CFR
			63.6645.
§63.9(e)	Notification of performance	Yes	Except that 40 CFR
	test		63.9(e) only applies
			as specified in 40 CFR
			63.6645.
§63.9(f)	Notification of visible	No	Subpart ZZZZ does not
	emission (VE)/opacity test		contain opacity or VE
			standards.
§63.9(g)(1)	Notification of performance	Yes	Except that 40 CFR
	evaluation		63.9(g) only applies
			as specified in 40 CFR
			63.6645.
§63.9(g)(2)	Notification of use of COMS	No	Subpart ZZZZ does not
	data		contain opacity or VE
			standards.
§63.9(g)(3)	Notification that criterion	Yes	If alternative is in
	for alternative to RATA is		use.
	exceeded		
		Except that	
		40 CFR	
		63.9(g)	
		only	
		applies as	
		specified	
		in 40 CFR	
		63.6645.	

General	T	1	1
provisions		Applies to	
citation	Cubicat of aitation		Employation
	Subject of citation	subpart	Explanation
\$63.9(h)(1)-(6)	Notification of compliance	Yes	Except that
	status		notifications for
			sources using a CEMS
			are due 30 days after
			completion of
			performance
			evaluations. 40 CFR
			63.9(h)(4) is
			reserved.
			Except that 40 CFR
			63.9(h) only applies
			as specified in 40 CFR
			63.6645.
§63.9(i)	Adjustment of submittal	Yes.	
	deadlines		
§63.9(j)	Change in previous	Yes.	
	information		
§63.10(a)	Administrative provisions	Yes.	
	for recordkeeping/reporting		
§63.10(b)(1)	Record retention	Yes.	Except that the most
			recent 2 years of data
			do not have to be
			retained on site.
	Records related to SSM	No.	
(V)			
\$63.10(b)(2)(vi)	Records	Yes.	
-(xi)			
§63.10(b)(2)	Record when under waiver	Yes.	
(xii)			
§63.10(b)(2)	Records when using	Yes	For CO standard if
(xiii)	alternative to RATA		using RATA
			alternative.
§63.10(b)(2)	Records of supporting	Yes.	
(xiv)	documentation		
§63.10(b)(3)	Records of applicability	Yes.	
	determination		
§63.10(c)	Additional records for	Yes	Except that 40 CFR
	sources using CEMS		63.10(c)(2)-(4) and
			(9) are reserved.
§63.10(d)(1)	General reporting	Yes.	
	requirements		
§63.10(d)(2)	Report of performance test	Yes.	
	results		
§63.10(d)(3)	Reporting opacity or VE	No	Subpart ZZZZ does not
	observations		contain opacity or VE
			standards.
\$63.10(d)(4)	Progress reports	Yes.	
\$63.10(d)(5)	Startup, shutdown, and	No.	
, , , = ,	malfunction reports		
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General			
provisions		Applies to	
citation	Subject of citation	subpart	Explanation
\$63.10(e)(1) and			
(2)(i)	Additional CMS Reports	Yes.	
			Subpart ZZZZ does not
\$63.10(e)(2)(ii)	COMS-related report	No	require COMS.
	Excess emission and		Except that 40 CFR
	parameter exceedances		63.10(e)(3)(i)(C) is
§63.10(e)(3)	reports	Yes.	reserved.
			Subpart ZZZZ does not
§63.10(e)(4)	Reporting COMS data	No	require COMS.
	Waiver for		
§63.10(f)	recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
	State authority and		
§63.12	delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	